S P Mandali's

R. A. Podar College of Commerce and Economics (Autonomous),

Matunga, Mumbai-400019

Syllabus

and

Question paper pattern of Courses

Bachelor of Commerce

F.Y. B. Com Semester I & II

Syllabus as per National Education Policy 2020

To be implemented from Academic Year 2023-2024

Bachelor of Commerce (B.Com) Programme

Syllabus as per National Education Policy 2020

Course Structure

F.Y.B.COM (Level 4.5)

(To be implemented from Academic Year- 2023-24)

Bachelor of Commerce (B.Com) Programme
Under Choice Based Credit, Grading and Semester System
Course Structure
F.Y.BCOM (Level 4.5)
(To be implemented from Academic Year- 2023-24)

No. of Courses	Semester I	Credits	No. Of Courses	Semester II	Credits
1	**Major (06 credits)**		1	**Major (06 credits)**	
1.A	**Business Studies I**		1.A	**Business Studies II**	
1.A.a	Commerce I	**03**	1.A.a	Commerce II	**03**
1.A.b	Financial Accounting I	**03**	1.A.b	Financial Accounting II	**03**
2	**Minor (03 credits)**		2	**Minor (03 credits)**	
2.A.a	Business Economics I- Introductory Microeconomics	**03**	2.A.a	Business Economics II- Introductory Macroeconomics	**03**
3	**General Elective (GE)/ Open Elective (OE) (03 Credits)**		3	**General Elective (GE)/ Open Elective (OE) (03 Credits)**	
3.A.a	Mathematical & Statistical Techniques I	**03**	3.A.a	Mathematical & Statistical Techniques II	**03**
4	**Vocational & Skill Enhancement Courses (VSEC) (02 credits)**		4	**Vocational &Skill Enhancement Courses (VSEC) (02 credits)**	
4.A	**Vocational Skill Course (VSC)**		4.A	**Vocational Skill Course (VSC)**	
4.A.a	Technical Skills I.A / Technical Skills I.B	**02**	4.A.a	Technical Skills II.A / Technical Skills II.B	**02**
5	**Ability Enhancement Course, Value Enhancement Course, Indian Knowledge System (08 credits)**		5	**Ability Enhancement Course, Value Enhancement Course, Indian Knowledge System (08 credits)**	
5.A	**Ability Enhancement Course (AEC)**		5.A	**Ability Enhancement Course (AEC)**	
5.A.a	Language and Literature I	**03**	5.A.a	Language and Literature II	**03**
5.B	**Value Enhancement Course (VEC)**		5.B	**Value Enhancement Course (VEC)**	
5.B.a	Environmental Studies I	**03**	5.B.a	Environmental Studies II	**03**
	-		5.B.b	Indian Constitution and Electoral Governance	**02**
5.C	**Indian Knowledge System (IKS)**				
5.C.a	Conservation and Sustainability in Ancient India	**02**		-	
TOTAL	**CUMULATIVE CREDITS**	**22**	TOTAL	**CUMULATIVE CREDITS**	**22**

Exit option at the end of first year (on completion of semester I and semester II):

Under Graduate Certificate in Business Studies will be awarded to a learner on fulfillment of the following conditions:

1. The learner should have acquired 44 credits in Semester I and II considered together.
2. The learner should acquire additional 4 credits as per norms by completing recognized courses under National Skill Qualification Framework (NSQF) such as Tally, Entrepreneurial Development Course, and Internship.

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
1. Major (1.A Business Studies I**)**

Commerce I & II (3 Credits)

Semester I

1.Major	
1.A Business Studies I	
1.A.a Commerce- I (Introduction to Business)	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To bring awareness among the learners regarding the concept and importance of business.
CObj 2	To discuss contemporary issues in business.
CObj 3	To enable learners to examine and evaluate the business in the international environment
CObj 4	To appreciate the positive aspect of a conducive environment of business.
CObj 5	To encourage learners to think creatively and foster an innovative mindset for becoming successful entrepreneurs.
CObj 6	To familiarize learners with the step -by step process involved in setting up a new business, from generating business ideas to launching the venture.
Course Outcomes: Learners will be able:	
COut 1	To acquire a comprehensive understanding of the importance of business activity in a growing economy.
COut 2	To recognize and understand the various forms of business organization.
COut 3	To define business objectives depending on the lifecycle of the business.
COut 4	To appreciate the social responsibilities of business.
COut 5	To formulate business-level and corporate-level strategies for growth and stability.
COut 6	To recognize the interdependence between Business and Environment.
COut 7	To analyse the interface between business and various components of the Business Environment.
COut 8	To gain an understanding of the need for international collaborations/agreements and its implications on business.

COut 9	To review the functioning of major trading blocs in the international environment.
COut 10	To be acquainted with international trade development of recent times.
COut 11	To understand the concept and importance of entrepreneurship.
COut 12	To identify the various competencies required to be a successful entrepreneur.
COut 13	To appreciate the role played by various entrepreneurship training and development centers in India.
COut 14	To examine the importance, challenges faced, and solutions available for startups in India.
COut 15	To sensitize the problems faced by women entrepreneurs and understand the promotional measures undertaken by the government for women entrepreneurs.
COut 16	To cultivate an entrepreneurial mindset characterized by creativity, innovation, resilience, and a commitment to ethical business practices.
COut 17	To frame their business plan.
COut 18	To examine the importance of the project report. and prepare one
COut 19	To recognise the importance of feasibility study and its various aspects.
COut 20	To understand licensing and registration procedures.
COut 21	To identify the various sources of funds for starting up a new business.

Modules at a Glance

Commerce- I: Introduction to Business Commerce I		
Sr. No.	**Modules**	**No. of Lectures**
1	Understanding Business	11
2	Business Environment	11
3	Entrepreneurship	12
4	Setting up of Business	11
	Total No. of Lectures:	**45**

Sr. No	Modules
1	**Understanding Business**
	• Concept and scope of business • Importance of Business to various stakeholders • Business objectives and its classification • Reconciliation of Economic and social objectives • Business ethics and governance • Corporate Social Responsibility: Importance and Its Principles • Business-level and corporate-level strategies for growth and stability
2	**Business Environment**

	• Concept and Components of Business Environment
	• Inter-relationship between Business and Environment
	• Importance of Business Environment
	• PESTLE analysis and SWOC analysis
	• International Environment:
	      WTO Agreements (TRIPs, TRIMs, GATS, AOA)
	      Major Trading Blocs (EU, ASEAN, SAARC, NAFTA)
	      Recent development in the international trade environment

3	**Entrepreneurship**
	• Introduction: Concept and importance of entrepreneurship. • Entrepreneur and Manager, Entrepreneur and Intrapreneur • Types of Entrepreneurs • Competencies of An Entrepreneur (Biographies of successful entrepreneurs) • Entrepreneurship Training and Development centers in India. • Incentives to Entrepreneurs in India (Govt) • Startup space in India: Importance, Challenges and Solutions available in the changing scenario. • Women Entrepreneurs: Problems and Promotion. • Scope for Digital Entrepreneurship in India
4	**Setting up of Business**
	• Business Planning: Concept and stages of Business plan • Project planning, Project Report- Contents • Feasibility Study- various aspects and its Importance • Location- Factors determining location of Business Unit • Role of Government in promotion of Business Unit • Licensing and Registration Procedure, Filling returns and other required documents • Ease of doing business in India: Importance and India's position worldwide • Sources of funding for starting up new business

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
1. Major (1.A Mandatory Business Studies II**)**

Commerce I & II (3 Credits)

Semester II

1.Major
1.A Mandatory Business Studies II
1.A.a Commerce-II (Service Sector in India)
Course Objectives and Course Outcomes
Course Objectives
CObj 1	To make learners aware of the concept services and its scope.
CObj 2	To provide insights into key requirements, opportunities and challenges in the service sector.
CObj 3	To familiarize learners with the recent trends in the service sector.
CObj 4	To make learners appreciate the contribution of retailing in the service sector.
CObj 5	To enable learners to understand the present E-commerce scenario.
CObj 6	To encourage learners to identify the various career options available in the service sector.
Course Outcomes
COut 1	To recognize and understand the scope and characteristics of services.
COut 2	To enlist and relate the components of Consumer expectations.
COut 3	To identify the role of Customer Relationship Management in service marketing.
COut 4	To distinguish the concept of organised retailing and unorganised retailing.
COut 5	To get updated with various trends of retailing in India.
COut 6	To describe the retail formats prevailing in India.
COut 7	To appreciate the role of IT in retailing.
COut 8	To identify the various career opportunities available in retailing.
COut 9	To gain understanding on the concept and scope of BPO/KPO and LPO.
COut 10	To get acquainted with the concept of Enterprise resource planning.
COut 11	To list the various trends in the Banking and Insurance sector.

COut 12	To recognise trends in the tourism sector and hospitality sector.
COut 13	To explore trends in the aviation sector.
COut 14	To identify the trends in the health and wellness sector.
COut 15	To recall recent trends in the logistic sector.
COut 16	To develop a comprehensive understanding of E-commerce and its features.
COut 17	To appreciate the benefits of E-Commerce.
COut 18	To describe the various challenges of E-Commerce.
COut 19	To review the various Internet Payment Systems.
COut 20	To illustrate the various business models of E-commerce.
COut 21	To recognize the importance and list various techniques in E-Marketing.
COut 22	To apply the understanding of Cyber Security in the day today life.
COut 23	To identify various career options in the service sector.

Modules at a Glance

	Commerce-II: Service Sector in India	
Sr. No.	**Modules**	**No. of Lectures**
1	Introduction to Services Sector	11
2	Retailing	11
3	Recent Trends in Services Sector	12
4	E – Commerce	11
	Total No. of Lectures:	

Sr. No	Modules
1	**Introduction to Services Sector**
	• Services: Concept and its Characteristics • Scope of Services • Importance of Service sector in the Indian context. • Marketing Mix for Services • Consumer Expectations and its Components • Customer Relationship Management concept and its Role in service marketing
2	**Retailing**
	• Concept of organized and unorganized retailing • Trends in retailing in India • Survival strategies for unorganized Retailers. • Retail Format: Store format, Non-Store format • Store Planning, design, and layout. • IT in retailing • Mall Management, Retail Franchising, FDI in Retailing, • Careers in Retailing.
3	**Recent Trends in Services Sector**
	• ITES Sector: Concept and scope of BPO/ KPO/LPO • Enterprise Resource Planning • Trends in Aviation Sector

		• Trends in Banking Sector
		• Trends in Insurance Sector
		• Trends in Tourism Sector
		• Trends in Logistics Sector
		• Trends in Health and Wellness
		• Trends in Hospitality Sector
4	**E-Commerce**	
		• E-Commerce-Concept, Features.
		• Benefits of E-Commerce
		• Challenges of E-Commerce
		• Internet Payment systems
		• Business Models of E-Commerce
		• E-Marketing- Importance and Techniques
		• Cyber Security and its needs

Commerce I & II

Question Paper
Pattern (Academic
Year: 2023-2024)

Internal Examination & Semester End Examination – 100 Marks

A] Internals-40 Marks (any two)

Class test , Group discussions Role play, Power point presentation, Article review, Experiential learning Case Study- Discussion/ Presentation.

B] Semester End Examination (SEE)- 60 Marks

Maximum Marks   60
Duration   : 2
Hours
Note**: (**1) All questions are Compulsory.

Question No.	Particulars (Nature of Questions)	Marks (Given)
Q-1 (Module-I)	Answer any 2 out of 3 a) b) c)	12
Q-2 (Module-II)	Answer any 2 out of 3 a) b) c)	12
Q-3 (Module-III)	Answer any 2 out of 3 a) b) c)	12
Q-4 (Module-IV)	Answer any 2 out of 3 a) b) c)	12
Q-5	A) Case Study OR B) Write Short Notes on (Any 3 out of 5) Based on Entire Syllabus	12
	Total	**60**

Reference Books (With Chapters):

1.   Kew John, Business Environment: Managing in a Strategic Context, Jaico Publications 2006

2.   Hanke John K, Business Forecasting, Prentice Hall India, 2002

3.   Paul Justin, Business Environment, Tata McGraw Hill, 2008

4.   Butter David, Business Planning: A Guide to Business Start-up, Butterworth Heinemann, 2003

5.   Piramal Gita, Business Legends, Penguin Books, 1998

6.   Hitt Michael A, Strategic Management, Cengage Learning ,2016 7.Zeithaml, Valarie A, Services Marketing, McGraw Hill Education,2011

7.   Gupta S L, Retailing & E- tailing, International Book House, New Delhi, 2011

8.   Raghuram G, Logistics &Supply Chain Management: Cases and Concepts, Macmillan Business Books,

9.   Joseph P T, E-Commerce an Indian Perspective, Prentice Hall India, 2015

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
1. Major (1.A Mandatory Business Studies I**)**

Financial Accounting I & II (3 Credits)

Semester I

1.Major
1.A Mandatory Business Studies I
1.A.b Financial Accounting I
Course Objectives and Course Outcomes
Course Objectives

CObj 1	To equip learners with fundamental accounting practices and mandatory requirements in maintaining books of accounts and reporting financial results.
CObj 2	To familiarize learners with related areas in financial reporting such as inventory valuation and year-end closing procedures at the time of financial reporting.
CObj 3	To introduce learners to financial reporting in case of manufacturing concern.
CObj 4	To orient learners towards accounting in case of distinct areas and special transactions.
Course Outcomes	
COut 1	Learners will be able to demonstrate a thorough understanding of the fundamental accounting concepts & conventions in accounts writing and financial reporting.
COut 2	Learners will acquire the ability to accurately classify transactions as either Capital or Revenue in preparation and presentation of financial statements.
COut 3	Learners will acquire the ability to apply relevant (AS-1, AS-2, AS-9, AS-10 and AS-19) accounting standards in preparation and presentation of financial statements
COut 4	Learners will understand key accounting terms and apply them in the preparation and presentation of financial statements.
COut 5	Learners will get acquainted with the methods of inventory valuation that are mandated in preparation and presentation of financial statements.
COut 6	Learners will demonstrate the ability to prepare final accounts of a manufacturer considering typical transactions relating to manufacturing concern.
COut 7	Learners will demonstrate the ability to differentiate between installment sales and hire purchase, understand interest calculations under different cases and apply relevant accounting methods.

Modules at a Glance

	Financial Accounting I	
Sr. No.	**Modules**	**No. of Lectures**
1	Introduction to Fundamentals of Accounting	12
2	Valuation of Inventories: AS-2	10
3	Final Accounts of Manufacturing Enterprise	12
4	Accounting for Installment Sale	11
	Total No. of Lectures:	**45**

Sr. No	Modules
1.	**Introduction to Fundamentals of Accounting**
	● Accounting Concepts: Business Entity, Going Concern, Money Measurement, Periodicity, Accrual, Matching, Realisation, Historical Cost, Fair Value, Dual Aspect Important Terms: Contingent Assets, Contingent Liabilities, Provisions v/s Reserves, Charge v/s Appropriation ● Capital and Revenue Items: (Payment, Receipt, Income, Expenditure, Loss & Profit) ● Accounting Conventions: Conservatism, Materiality, Consistency, Uniformity, Full Disclosure ● Accounting Standards: AS-1: Disclosure of Accounting Policies: Purpose, Areas of Policies, Illustrations AS-2: Valuation of Inventories (Separate Module:2) AS-9: Revenue Recognition: Meaning and Scope, Transactions excluded, Sale of Goods, Rendering of Services, Effects of Uncertainties, Disclosure, Illustrations AS-10: Property Plant and Equipment : Introduction, Definitions, Applicability, Disclosure, Illustrations AS 19: Lease: Meaning of lease, Types of Leases, Identification of Financial & Operating lease
2.	**Valuation of Inventories: AS-2**

	● AS-2: Valuation of Inventories: Meaning and Definition, Applicability, Measurement of Inventory, Disclosure in Final Account, Explanation with Illustrations ● Inventory Valuation (Stock): Cost for Inventory Valuation, Inventory Systems, Periodic Inventory, Perpetual Inventory, Valuation: Meaning and Importance, Methods of Stock Valuation as per AS-2, First in First Out (FIFO) Method, Weighted Average Method ● Stock Reconciliation (when physical stock taken on, before or after the balance sheet date)
3.	**Final Accounts of Manufacturing Enterprise**
	● Determination of Raw Material Consumed & Cost of Production/ Manufacturing ● Treatment of sale of scrap ● Apportionment of common expenses incurred for factory and office ● Types of inventories ● Adjustment & Closing entries ● Final accounts of Manufacturing concern (Proprietary Firm)
4.	**Accounting for Installment Sale**
	● Installment Sale: Meaning, Distinction between Hire Purchase and Installment Sale, Calculation of Interest, Accounting for Installment Sale by Asset Purchase (Credit Purchase) Method, Interest Suspense Method.

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
1. Major (1.A Mandatory Business Studies II**)**

Financial Accounting I & II (3 Credits)

Semester II

1.Major
1.A Mandatory Business Studies II
1.A.b Financial Accounting II
Course Objectives and Course Outcomes
Course Objectives

CObj 1	To equip learners with the necessary skills to prepare financial reports even in cases where books of accounts are not maintained scientifically and systematically.
CObj 2	To ascertain financial results when organization is segmented based on profit center.
CObj 3	To determine the financial performance of a distantly located business division, whether it is located within the same country or overseas.
CObj 4	To familiarize learners about the accounting of transactions recorded in foreign currencies.

Course Outcomes	
COut 1	Learners will be able to apply accounting principles and methods while preparing financial statements from incomplete records.
COut 2	Learners will gain an understanding of foreign currency transactions, including the computation and treatment of exchange rate fluctuations and its effect on ascertaining financial result.
COut 3	Learners will acquire knowledge of departmental accounts and understand the basis for apportionment of common expenses and incomes/receipts over different departments.
COut 4	Learners will understand the significance and purpose of general profit and loss accounts.
COut 5	Learners will be able to classify branches and ascertain branch results under suitable methods, including foreign branch transactions.

Modules at a Glance

Financial Accounting II		
Sr. No.	**Modules**	**No. of Lectures**
1	Accounting from Incomplete Records	13
2	Accounting of Foreign Currency Transaction	10
3	Departmental Accounts	09
4	Branch Accounts	13
	Total No. of Lectures:	**45**

Sr. No	Modules
1.	**Accounting from Incomplete Records**
	Introduction, Problems on preparation of final accounts of Proprietary Trading Concern (By Conversion Method)
2.	**Accounting of Foreign Currency Transaction**
	In relation to purchase and sale of goods, services, Assets, Loan and Credit transactions. Computation and Treatment of Exchange Rate Differences
3.	**Departmental Accounts**
	Meaning, Basis of Allocation of Expenses, Basis of Allocation of Incomes/Receipts, Inter-Departmental Transfers, At Cost Price, At Invoice Price, Stock Reserve, Illustrations –Departmental Trading and Profit & Loss Account, General Profit & Loss a/c, and Balance Sheet.
4.	**Branch Accounts**
	Meaning, Classification of Branch, Accounting of Independent Branch, not maintaining full books by Debtors Method and Stock and Debtors Method. Foreign Branch.

Financial Accounting I & II
Question Paper Pattern
(Academic Year: 2023-2024)

Internal Examination & Semester End Examination – 100 Marks

A] Internals-40 Marks

- **Class Test**   **20 marks**
- **Project/Assignment**   **20 marks**
  Total   **40 marks**

B] Semester End Examination (SEE)- 60 Marks

Maximum Marks   :   60
Number of Questions to be Set :   5 (Five)
Duration   :   2 Hours Note:

(1)   Question No. 1 and 5 are compulsory
(2)   Attempt any two questions from remaining Q.No. 2, 3 and 4

*Note – Q. No. 2, 3 & 4 may be divided into sub questions of 10/5, 8/7 or 5/5/5 marks each or one full question of 15 Marks.

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)

Q-1	Q1 A: Case Study : 9 Marks
	Q1 B: Concept /Application Based Practical Questions : 6 Marks
	        To be given: Three (03)
	
	        To be attempted: Any Two (02)
		18	15

Q-2	Practical Question/s (*)	15	15
Q-3	Practical Question/s (*)	15	15
Q-4	Practical Question/s (*)	15	15
Q-5	Concept Based Theory Questions To be given: Six (06) To be attempted: Any Five (05)	18	15
	Total	**81**	**60**

Reference Books:

1. Introduction to Accountancy by T. S. Grewal, S. Chand and Company (P) Ltd., New Delhi

2. Advance Accounts by Shukla & Grewal, S. Chand and Company (P) Ltd., New Delhi

3. Advanced Accountancy by R. L Gupta and M Radhaswamy, S. Chand and Company (P)Ltd., New Delhi

4. Modern Accountancy by Mukherjee and Hanif, Tata Mc. Grow Hill & Co. Ltd., Mumbai

5. Financial Accounting by Lesile Chandwichk, Pentice Hall of India Adin Bakley (P) Ltd.

6. Financial Accounting for Management by Dr. Dinesh Harsalekar, Multi-Tech. PublishingCo. Ltd., Mumbai.

7. Financial Accounting by P. C. Tulsian, Pearson Publications, New Delhi Accounting Principles by Anthony, R.N. and Reece J.S., Richard Irwin Inc.

8. Financial Accounting by Monga, J.R. Ahuja, Girish Ahujaand Shehgal Ashok, MayurPaper Back

9. Compendium of Statement & Standard of Accounting, ICAI. Indian Accounting Standards,Ashish Bhattacharya, Tata Mc. Grow Hill & Co. Ltd., Mumbai

10. Financial Accounting by Williams , Tata Mc. Grow Hill & Co. Ltd., Mumbai

11. Company Accounting Standards by Shrinivasan Anand, Taxman.

12. Financial Accounting by V. Rajasekaran, Pearson Publications, New Delhi.

13. Introduction to Financial Accounting by Horngren, Pearson Publications.

14. Financial Accounting by M. Mukherjee.M. Hanif. Tata McGraw Hill Education PrivateLtd; New Delhi

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
2. Minor

Business Economics I & II (3 Credits)

Semester I

2.Minor
2.A.a Business Economics I- Introductory Microeconomics
Course Objectives and Course Outcomes
Course Objectives

CObj 1	Understand the fundamental concepts of Microeconomics like demand and supply, market equilibrium, consumer behavior, and production theory.
CObj 2	Explore how individuals make decisions regarding consumption, production and how these decisions affect resource allocation.
CObj 3	Develop critical thinking and problem-solving skills by applying economic principles to real-world issues.
CObj 4	Analyze economic relationships using mathematical and graphical tools to interpret economic data and solve economic problems.
CObj 5	Enhance critical thinking and problem-solving abilities by evaluating economic problems, analyze data, and propose solutions.

Course Outcomes	
COut 1	Recall and list the ten principles of economics and key concepts related to market forces, market equilibrium, and resource allocation.
COut 2	Demonstrate comprehension of the principles of economics and the relationship between market forces, market equilibrium, and resource allocation.
COut 3	Apply economic principles and concepts to analyze real-world scenarios and make informed decisions based on economic reasoning.
COut 4	Analyze the impact of changes in demand and supply on market equilibrium, prices, and resource allocation and evaluate the effects of various factors on market outcomes and identify potential solutions to economic problems.
COut 5	Critically evaluate economic policies, theories, and arguments related to market forces, equilibrium, and resource allocation and assess the effectiveness and efficiency of different approaches and propose alternatives based on economic analysis.
COut 6	Comprehend the concept of the myth of the rational consumer and critically evaluate its implications on consumer behavior and decision-making.
COut 7	Apply ordinal utility theory and the indifference curve approach to analyze consumer preferences, budget constraints, determine consumer equilibrium and solve numerical problems related to consumer choices and preferences.
COut 8	Analyze the income and substitution effects of price changes on consumer behavior and consumption choices, evaluate the impact of changes in prices and income on the consumer's

	optimal consumption bundle and interpret price consumption curves.
COut 9	Critically evaluate the use of indifference curves as an analytical tool in comparing different types of subsidies, such as cash subsidies versus kind subsidies.
COut 10	Develop innovative approaches that consider psychological, social, and behavioral factors influencing consumer choices and preferences.
COut 11	Comprehend the concept of production function and its relationship with inputs and outputs in the short and long run.
COut 12	Apply the concept of the production function to analyze short-run production and determine the optimal combination of inputs to achieve a given level of output.
COut 13	Analyze the impact of changes in input proportions on output in the short run and long run, considering the Law of Variable Proportions and the Laws of Returns to Scale respectively.
COut 14	Evaluate the economies and diseconomies of scale that arise from changes in the scale of production and assess the advantages and disadvantages of expanding or reducing production scale, considering cost factors and production efficiency.
COut 15	Design and propose strategies for optimizing production processes and achieving economies of scale and develop innovative approaches to improve production efficiency, such as identifying opportunities for specialization, automation, or technological advancements in the long run.
COut 16	Understand the different types of costs, such as accounting costs and economic costs, implicit and explicit costs, social and private costs, historical costs and replacement costs, sunk costs and incremental costs and comprehend the distinctions and relationships between these cost concepts.
COut 17	Apply the concepts of cost-output relationships in the short run to solve hypothetical numerical problems and analyze how changes in inputs and output levels affect costs, and calculate total cost, average cost, and marginal cost based on given data.
COut 18	Analyze the long-run cost function and its relationship with production output and examine the determinants of long-run costs, including economies of scale, diseconomies of scale, and constant returns to scale.
COut 19	Evaluate the revenue concepts of total revenue, average revenue, and marginal revenue and analyze the relationships between these revenue measures and output levels, and assess their significance in decision-making and profit maximization.
COut 20	Develop innovative approaches to optimize revenue generation and cost-efficiency in various business scenarios.

Modules at a Glance

Business Economics I		
Sr. No.	**Modules**	**No. of Lectures**
1	Principles of Economics	10
2	Consumer Behaviour Theory	15
3	Production Decisions	10
4	Cost of Production	10
	Total No. of Lectures:	45

Sr. No	Modules
1	**Principles of Economics**
	A. The ten Principles of Economics B. Thinking like an Economist C. The Market Forces of Demand and Supply, Market Equilibrium D. How Prices allocate resources
2	**Consumer Behaviour Theory**
	A. The myth of the rational consumer B. Ordinal Utility theory: (Indifference curve approach): Consumer's preferences; Indifference curves; Budget line; Consumer's equilibrium C. Income and substitution effect; Price consumption curve. D. Indifference curves as an analytical tool (Cash subsidy v/s kind subsidy)
3	**Production Decisions**
	A. Production function: short run analysis with Law of Variable Proportions B. Production function with two variable inputs- isoquants, ridge lines and least cost combination of inputs C. Long run production function and Laws of Returns to Scale D. Economies and diseconomies of Scale

4	**Cost and Revenue**
	A. Types of Cost: accounting cost and economic cost, implicit and explicit cost, social and private cost, historical cost and replacement cost, sunk cost and incremental cost -fixed and variable cost - total, average and marginal cost B. Cost Output Relationship in the short Run (hypothetical numerical problems to be discussed) C. Long Run cost function D. Revenue- Concepts of Total Revenue, Average Revenue, Marginal Revenue

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
2. Minor
Business Economics I & II (3 Credits)

Semester II

2.Minor
2.A.a Business Economics II- Introductory Macroeconomics
Course Objectives and Course Outcomes
Course Objectives

CObj 1	Understand key macroeconomic concepts such as gross domestic product (GDP), inflation, unemployment, aggregate demand and supply and the significance of these indicators for assessing the overall health of the economy.
CObj 2	Examine the factors that influence economic performance at the national level, including consumption, investment, government spending, exports, and imports.
CObj 3	Apply macroeconomic principles and theories to analyze real-world economic problems, such as the impact of government policies, business cycles, and global economic events.
CObj 4	Promote the development of critical thinking skills to evaluate economic arguments, analyze economic policies, and understand economic issues affecting societies and individuals

Course Outcomes	
COut 1	Understand the key concepts and variables in Macroeconomics, including national income, GDP, GNP, net national product, personal income, personal disposable income, components of GDP (consumption, investment, government purchases, net exports), comprehend the differences between real and nominal GDP and the use of the GDP deflator.
COut 2	Apply the concept of national income as both income and expenditure, calculating GDP and GNP based on given data and analyze the components of GDP and their contributions to economic growth and fluctuations.
COut 3	Analyze the circular flow of aggregate income and expenditure in both closed and open economy models and understand the importance of the circular flow in depicting the interdependencies between households, businesses, government and how changes in one sector can impact the entire economy.
COut 4	Evaluate the features and phases of trade cycles, such as expansion, peak, contraction, and trough, analyze the causes and consequences of business cycles and assess the effectiveness of policy measures in managing and stabilizing the economy during different phases of the cycle.
COut 5	Construct models and scenarios to illustrate the circular flow of income and expenditure in

	different economic contexts, develop strategies and policies to mitigate the negative effects of trade cycles and promote sustainable economic growth and stability.
COut 6	Understand the Keynesian Cross model and its components, including aggregate demand, the consumption function, the investment function, the marginal efficiency of capital; comprehend the properties, assumptions, and implications of the consumption function and the investment function.
COut 7	Apply the Keynesian Cross model to analyze the impact of changes in aggregate demand on income and output and calculate the multiplier effect and understand how changes in investment can lead to changes in income and output.
COut 8	Analyze the assumptions, working, leakages, criticisms, and importance of the investment multiplier effect on income and output and critically evaluate the paradox of thrift.
COut 9	Evaluate the relevance of Keynesian theory tools to developing countries and assess the applicability and effectiveness of Keynesian policy measures, such as fiscal policy and government intervention, in addressing economic challenges and promoting growth in developing economies.
COut 10	Propose strategies and policies based on Keynesian theory tools to address specific economic issues faced by developing countries and develop innovative approaches to promote economic stability, increase aggregate demand, and stimulate investment and consumption in developing economies.
COut 11	Understand the liquidity preference theory and the concept of demand for money, including speculative demand and transaction demand and comprehend how interest rates are determined based on the demand for money.
COut 12	Apply the liquidity preference theory to analyze the factors that influence the demand for money and the determination of interest rates and evaluate how changes in income, expected returns on assets, and liquidity preferences impact the demand for money.
COut 13	Analyze the concept of a liquidity trap and its implications for monetary policy and examine the conditions under which monetary policy becomes ineffective in stimulating economic activity due to very low interest rates and a preference for holding money rather than investing or spending.
COut 14	Evaluate the determinants of money supply and the factors influencing the velocity of circulation of money and assess how changes in the money supply and velocity affect the overall level of economic activity and inflation.
COut 15	Integrate the commodity and money markets using the IS-LM model and analyze the equilibrium in the goods market and the money market, considering the impact of changes in fiscal and

	monetary policy.
COut 16	Understand the concepts of demand-pull inflation and cost-push inflation, comprehend the causes and mechanisms behind these types of inflation and the effects they have on the economy, such as rising prices, reduced purchasing power, and income redistribution.
COut 17	Apply the understanding of inflation to analyze the nature of inflation in developing economies and examine the specific factors that contribute to inflationary pressures in these economies, such as rapid economic growth, supply constraints, and external shocks.
COut 18	Analyze policy measures aimed at curbing inflation, with a focus on monetary policy and inflation targeting and evaluate the effectiveness and limitations of these measures in controlling inflation and maintaining price stability.
COut 19	Evaluate the short-run trade-off between inflation and unemployment, as depicted by the Phillips Curve, analyze the inverse relationship between inflation and unemployment rates, assess the trade-offs and policy implications associated with targeting low inflation or low unemployment.
COut 20	Critically appraise the basic propositions of supply-side economics, analyze the principles and policy recommendations of supply-side economics, such as reducing tax rates, deregulation, and promoting entrepreneurship.

Modules at a Glance

Sr. No.	Modules	No. of Lectures
1	Overview of Macroeconomics	10
2	Basic Concepts of Keynesian Economics	15
3	Money Demand, Supply and IS- LM Model	10
4	Inflation, Unemployment and Phillips Curve	10
	Total No. of Lectures:	**45**

Sr. No	Modules
1	**Overview of Macroeconomics**
	A. Concepts and variables in Macroeconomics B. National Income: Treating GDP both as Income and Expenditure, Gross Domestic Product (GDP), Gross National Product (GNP), The Difference Between GDP and GNP, Net National Product, Personal Income, Personal Disposable Income, Components of GDP: Consumption, Investment, Government Purchases, Net Exports; Real and Nominal GDP: GDP Deflator C. Circular flow of aggregate income and expenditure and its importance-closed and open economy models D. Trade Cycles: Features and Phases
2	**Basic Concepts of Keynesian Economics**
	A. The Keynesian Cross B. Components of Aggregate demand - Consumption Function: Properties, Assumptions and Implications; Investment function and Marginal Efficiency of capital C. Investment Multiplier effect on Income and Output: Assumptions, Working, Leakages, Criticism and Importance-paradox of thrift D. Relevance of Keynesian theory tools to the developing countries
3	**Money Demand, Supply and IS-LM Model**
	A. Demand for Money: The Liquidity Preference Theory - Speculative Demand; determination of Interest Rate, and Transaction Demand for Money B. The concept of Liquidity Trap C. Money Supply: Determinants of Money Supply –Factors influencing velocity of circulation of money D. The IS-LM model of integration of commodity and money markets
4	**Inflation, Unemployment and Phillips Curve**
	A. Inflation: Demand pull inflation and cost push inflation- Effects of Inflation-Nature of inflation in a developing economy B. Policy measures to curb inflation- monetary policy and inflation targeting C. The Short-Run Trade-off between inflation and unemployment: the Phillips Curve D. Supply Side Economics: Basic propositions and critical appraisal

Business Economics I & II
Question Paper Pattern
(Academic Year: 2023-2024)

Internal Examination & Semester End Examination – 100 Marks

A] Internals-40 Marks
 (i) C.A.-I : Test – (Objective type of questions)- 20 Marks
 (ii) C.A.-II : Case Studies/Assignments/- 20 Marks

B] Semester End Examination (SEE)- 60 Marks

Maximum Marks   60
Duration   : 2 Hours
  Note: 1) All four questions are compulsory
        2) All Questions carry equal marks
        3) Attempt **any two question**s out of three in each question

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1 (from Module 1)	A) Full Length Question B) Full Length Question C) Application/Numerical Question	15 Marks	15 Marks
Q-2 (from Module 2)	A) Full Length Question B) Full Length Question C) Application/Numerical Question	15 Marks	15 Marks
Q-3 (from Module 3)	A) Full Length Question B) Full Length Question C) Application/Numerical Question	15 Marks	15 Marks
Q-4 (from Module 4)	A) Full Length Question B) Full Length Question C) Application/Numerical Question	15 Marks	15 Marks
	Total		60

Reference Books (With Chapters):

Semester I-
Essential Reading:
1. Ahuja. H.L.; Principles of Economics; S Chand and Company Ltd; 22nd edition; 2019
2. A. Koutsoyiannis; Modern Microeconomics; Macmillan Publishers India Ltd.; 2nd edition; 2009
3. Dominick Salvatore; Microeconomics: Theory and Applications; Oxford University Press; 5th edition; 2015
4. N. Gregory Mankiw; Principles of Microeconomics; Cengage Learning; 8th edition; 2020
5. Robert S. Pindyck and Daniel L. Rubinfeld; Microeconomics; Pearson Education; 9th edition; 2017

Advanced Reading:

1. Paul Krugman and Robin Wells; Microeconomics; Worth Publishers; 5th edition; 2019
2. Paul Samuelson and William Nordhaus; Economics: Principles, Problems, and Policies; Tata McGraw-Hill Education; 19th edition; 2010
3. Robert H. Frank, Ben S. Bernanke, Kate Antonovics, and Ori Heffetz; Principles of Microeconomics; Tata McGraw-Hill Education; 7th edition; 2018
4. Varian Hal.R. ; Intermediate Microeconomics- a modern approach; W.W. Norton; 8th edition; 2014

Semester II-
Essential Reading:

1. Andrew B. Abel, Ben S. Bernanke, and Dean Croushore; Macroeconomics; Pearson Education; 9th edition; 2017
2. Edward Shapiro; Macro-Economic Analysis, Galgotia Publication, New Delhi; 2001
3. Eugene A. Diulio; Schaum's Outline of Macroeconomics; McGraw Hill; Third edition (2020)
4. N. Gregory Mankiw; Macroeconomics; Cengage Learning India; 8th edition; 2020

Advanced Reading:

1. John B. Taylor and Akila Weerapana; Principles of Macroeconomics; Cengage Learning; 8th edition; 2018
2. Olivier Blanchard; Macroeconomics; Pearson Education; 7th edition; 2016
3. Rudiger Dornbusch, Stanley Fischer, and Richard Startz; Macroeconomics; McGraw-Hill Education; 12th edition; 2018
4. William J. Baumol and Alan S. Blinder; Macroeconomics: Principles and Policy; Cengage Learning India; 14th edition; 2018

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
3. General /Open Elective (OE)
General Elective (GE)/Open Elective (OE)
Mathematical and Statistical Techniques I & II (3 Credits)
Semester I

3.General/Open Elective
General Elective (GE)/Open Elective (OE)
3.A Mathematical and Statistical Techniques I
Course Objectives and Course Outcomes

	Course Objectives
CObj 1	To develop a foundation of the concepts of LPP and its applications to managerial problems.
CObj 2	To evaluate the risk and return characteristics of investment portfolios using appropriate measures.
CObj 3	To apply differentiation techniques to solve word problems in economics
CObj 4	To develop a positive attitude to think, analyze and articulate logically

	Course Outcomes
COut 1	To model real-world problems as linear programming problems.
COut 2	To apply different tools to solve Linear Programming problems and interpret the solutions
COut 3	To Familiarize oneself with software tools specifically designed for solving linear programming problems
COut 4	To distinguish between the fundamental concepts related to investment in shares and mutual funds
COut 5	To Discuss the importance of market risk.
COut 6	To Apply the knowledge and skills acquired throughout the course to make informed investment decisions
COut 7	To Utilize the various rules and techniques to solve optimization problems commonly encountered in economics.
COut 8	To Use differentiation to analyze economic growth models and understand the factors influencing long-term economic growth.
COut 9	To Translate word problems into mathematical equations and appropriately apply differentiation techniques to solve them

Modules at a Glance

Sr. No.	Modules	No. of Lectures
	Mathematical and Statistical Techniques I	
1.	**Mathematical applications in management**	15
2.	**Mathematical applications in finance**	15
3.	**Mathematical applications in economics**	15
	Total number of lecture :	45

Sr. No	Modules
1.	**Mathematical applications in management**
	LLP model in equation form, the graphical method, transition from graphical to algebraic solution, the simplex method (problems with 2 variables), Big M method (formulation problems only), introduction to TORA Text book: Hamdy A. Taha, Operations Research: An Introduction, 10th edition, Pearson Education Limited Chapter 3 : Sections 3.1 - 3.4.1 Prerequisite: Chapter 1 and 2
2.	**Mathematical applications in finance**
	Problems on shares and mutual funds, systematic investment plan, historical returns and risk, expected return and risk of a single asset and a portfolio, measurement of market risk. Text book: Prasanna Chandra, Financial Management: Theory and Practice, 10th edition, Tata McGraw Hill Education Private Limited Chapter 8 : Sections 8.1-8.4
3.	**Mathematical applications in economics**
	The derivative of a function, Rules of differentiation, Marginal functions, Elasticity, Optimization of economic functions, The derivative of the exponential and natural logarithm functions, Functions of several variables, Partial elasticity and marginal functions Text book: Ian Jacques, Mathematics For Economics And Business, 5th edition, Pearson Education Limited Chapter 4 : Sections 4.1-4.8 Chapter 5 : Sections 5.1-5.6 Prerequisite: Chapter 1 and 2

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
3. General /Open Elective (OE)
General Elective (GE)/Open Elective (OE)

Mathematical and Statistical Techniques I & II (3 Credits)

Semester II

3.General/Open Elective	
General Elective (GE)/Open Elective (OE)	
3.A Mathematical and Statistical Techniques II	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To equip the learner with knowledge of regression analysis as a statistical tool for understanding and predicting relationships between variables in business and economic contexts.
CObj 2	To analyze and interpret time-dependent data in order to make informed business and economic decisions.
CObj 3	To demonstrate the ability to make informed decisions using appropriate decision theory method.
Course Outcomes	
COut 1	To Recall the basic concepts and principles of regression analysis.
COut 2	To apply critical thinking skills to analyze and interpret regression coefficients and the determination coefficient in the context of specific research questions or problems.
COut 3	To use statistical software to calculate and interpret the regression line equation and its coefficients.
COut 4	To apply critical thinking skills to evaluate the appropriateness of using the least squares method in different research contexts.
COut 5	To Estimate and understand the relationship between variables, enabling prediction.
COut 6	To understand the concept of prediction intervals and their role in estimating the range of future observations.
COut 7	To visualize and analyze time series data using appropriate plots and graphs.
COut 8	To identify different types of time series patterns, such as trends, seasonality, and cyclic behavior.
COut 9	To develop strategies to handle seasonality and trends in time series data.
COut 10	To identify patterns, trends, and dependencies within historical data in order to make forecasts and informed decisions about future events or phenomena
COut 11	To describe the difference between decisions under certainty, risk, and uncertainty.
COut 12	To identify different types of decision-making environments, such as deterministic and probabilistic.
COut 13	To discuss the concept of decision trees and their application in decision-making.
COut 14	To assess the sensitivity of decision outcomes to changes in probabilities and payoffs

Modules at a Glance

Sr. No.	Modules	No. of Lectures
	Mathematical and Statistical Techniques II	
1.	**Regression analysis**	**15**
2.	**Business forecasting**	**15**
3.	**Statistical applications in decision making**	**15**
	Total No. of Lectures:	**45**

Sr. No	Modules
1.	**Regression analysis**
	The estimation and interpretation of regression lines and its slope, coefficients of regression, correlation and determination coefficients, equations of regression lines using method of least squares, standard error, approximate prediction intervals and multiple regression equations. Text book: Richard I. Levin and David S. Rubin, Statistics for management, 8th edition, Pearson Education Limited Chapter 12 : Sections 12.1-12.3 Chapter 13 : Sections 13.1-13.2 Prerequisite: Chapter 1, 2 and 3
2.	**Business forecasting**
	Variations in time series, trend analysis, cyclic variation, seasonal variation, irregular variation Computations of all four components of time series, time series analysis in forecasting Text book: Richard I. Levin and David S. Rubin, Statistics for management, 8th edition, Pearson Education Limited Chapter 15 : Sections 15.1-15.8
3.	**Statistical applications in decision making**
	The decision-making situation/problem, decision-making under uncertainty, under risk, decision tree, multi stage decision trees. Text book: Richard I. Levin and David S. Rubin, Statistics for management, 8th edition, Pearson Education Limited Chapter 8 : Sections 8.1- 8.6, 8.8

Mathematical and Statistical Techniques I & II

Question Paper Pattern
(Academic Year: 2023-2024)

Internal Examination & Semester End Examination – 100 Marks

Grading Policy: The course grading will be based on the internal (40 marks) and the semester end exam (60 marks).

Internal exam evaluation: At the mid of the semester there will be a test (online/offline) for 20 marks. For the remaining 20 marks we will conduct either a second test or assignments or projects will be conducted.

Semester End exam evaluation: There will be a 60 marks examination conducted at the end of the semester. The question paper for this subject will follow the below pattern:

Question Number	Nature of question	Marks	
1 (Module I)	Attempt any FOUR out of five	5 each	20
	Total	20	
2 (Module II)	Attempt any FOUR out of five	5 each	20
	Total	20	
3 (Module III)	Attempt any FOUR out of five	5 each	20
	Total	20	
	Total	60	
Duration of the exam will be 2 Hours. All questions are compulsory.			

Reference Books (With Chapters):

1. Mathematics for Economics and Finance Methods and Modelling by Martin Anthony and Norman Biggs, Cambridge University Press, Cambridge low-priced edition, 2000.

2. Applied Calculus: By Stephen Waner and Steven Constenoble, Brooks/Cole Thomson Learning, second edition.

3. Business Mathematics By D. C. Sancheti and V. K. Kapoor, Sultan Chand & Sons, 2006.

4. Mathematics for Business Economics: By J. D. Gupta, P. K. Gupta and Man Mohan, Tata Mc-Graw Hill Publishing Co. Ltd., 1987.

5. Quantitative Methods-Part-I By S. Saha and S. Mukerji, New Central Book Agency, 1996.

6. Investments By J.C. Francis & R.W. Taylor, Schaum's Outlines, Tata Mc-Graw Hill Edition 2000.

7. Indian Mutual Funds Handbook : By Sundar Shankaran, Vision Books, 2006.

8. Mathematics for Economics and Business, Bhardwaj R S

9. Mathematics of Finance 2nd Edition Schaum's Outline Series Peter Zima, Robert Brows Tata McGraw-Hill Publishing CompanyLtd

10. Statistics for Management - Lovin R. Rubin D.S. (Prentice Hall of India)

11. Statistics - Theory, Method & Applications D.S.Sancheti & V. K. Kapoor.

12. Business Mathematics & Statistics : B Aggarwal, Ane Book Pvt. Limited.

13. Business Mathematics : D C Sancheti & V K Kapoor, Sultan Chand & Sons.

14. Business Mathematics : A P Verma, Asian Books Pvt. Limited.

15. Statistics of Management , Richard Levin & David S. Rubin, Prentice Hall of India , NewDelhi.

16. Statistics for Business & Economics, David R Anderson, Dennis J Sweney, Thomson Publication.

17. Business Mathematics, J.K. Singh, 2009,Himalaya PublishingHouse

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
4. Vocational & Skill Enhancement Courses (VSEC)
4.A Vocational Skill Courses (VSC)

4. A. a Technical Skills I & II (2 Credits)
Semester I

NOTE: Each Learner has a choice to learn between Group A or Group B

	Group A	O R	Group B
Semester I	Technical Skills I.A Python		Technical Skills I.B-Excel
Semester II	Technical Skills II.A- R Programing		Technical Skills II.B- Advance Excel

4. Vocational & Skill Enhancement Courses (VSEC)	
4.A Vocational Skill Courses (VSC)	
4.A.a Technical Skills I.A	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To Understand the Basics of Python
CObj 2	To get skills in the art of programming.
CObj 3	To learn how to control the flow of a program using conditional statements and loops.
CObj 4	To understand the importance of error handling in Python
Course Outcomes: Learners will be able:	
COut 1	To recall the basic syntax and data structures in Python programming.
COut 2	To remember common Python functions and their parameters.
COut 3	To explain the fundamental concepts of Python programming, such as variables, data types, and control structures
COut 4	To enable learners to understand the coding in python.
COut 5	To get skills in the art of programming.
COut 6	To use Python as a calculator.
COut 7	To apply Python programming techniques to read, clean, and preprocess data.
COut 8	To analyze and interpret Python code to identify errors and bugs.

Modules at a Glance

Technical skills- I.A		
Sr. No.	**Modules**	**No. of Lectures**
1.	**Introduction of Python**	15
2.	**Python Data Types and Statements**	15
	Total No. of Lectures:	30

Sr. No	Modules
1.	**Introduction of Python**
	Setting up Python, Your First Python Program, Interact With User Input, Arithmetic Operators and Expressions.
	Text Book:
	Python Basics: A Practical Introduction to Python 3 FOURTH EDITION
	By David Amos, Dan Bader, Joanna Jablonski, Fletcher Heisler Real Python
	(Chapter 2: 2.1,2.2,2.3 Chapter 3: 3.1,3.2,3.3,3.4,3.5 Chapter 4: 4.4, Chapter 5.2,5.3,5.5)
2.	**Python Data Types and Statements**
	Numbers, Strings, Lists, Tuples, Boolean, Logical Operators, Relational Operators, Conditional Statements, Loop statements.
	Text Book:
	Python Tutorial Release 3.7.0 By Guido van Rossum and the Python development team
	Python Software Foundation
	(Chapter 3: 3.1,3.2 Chapter 4:4.1,4.2,4.3,4.4,4.5,4.6,4.7 Chapter 5: 5.1,5.2,5.3)
	Beginning Python From Novice to Professional By Magnus Lie Hetland Apress
	(Chapter 2, Chapter 3, Chapter 5)

List of Practical :

1. Write a program that asks the user to enter his salary and calculate the DA, which is 10% of the salary; the HRA, which is 20% of the salary and the gross income, which is
   the sum total of the salary, DA and the HRA.

2. Write a programme that asks users to enter the marks obtained in 5 courses and find the average number of marks obtained by the user.

3. Write a programme to find the maximum number from given three numbers.

4. Write a program to prompt for a score between 0.0 and 1.0. If the score is out of range, print an error message. If the score is between 0.0 and 1.0, print a grade using the following table:

Score	Grade
>= 0.9	A
>= 0.8	B
>= 0.7	C
>= 0.6	D
< 0.6	F

5. Write a program to find the value of an algebraic expression for the given values.

6. Write a program that asks the user to enter a number and find all its factors.

7. Write a program to find the common factors of 2 numbers entered by the user.

List of Reference Books:

1. Python Basics by H. Basin New Age International (P) Ltd. Publishers.

2. Python for Everybody by Dr. Charles R. Severance

3. Making use of Python by Rashi Gupta John Wiley & Sons (2002)

4. Python for Beginners_ Comprehensive Guide to the Basics of Programming, Machine Learning, Data Science and Analysis with Python by Campbell , Alex. (2021)

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
4. Vocational & Skill Enhancement Courses (VSEC)
4.A Vocational Skill Courses (VSC)

4.A.a Technical Skills I & II (2 Credits)
Semester I

4. Vocational & Skill Enhancement Courses (VSEC)	
4.A Vocational Skill Courses (VSC)	
4.A.a Technical Skills I.B	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To provide learners with a comprehensive understanding of spreadsheet software and enable them to effectively organize.
CObj 2	To analyze, and present data as well as develop practical skills for problem-solving and decision-making in various academic and professional contexts.
Course Outcomes: Learners will be able:	
COut 1	To develop proficiency in utilizing spreadsheet software for organizing, analyzing, and presenting data effectively.
COut 2	To explain the fundamental concepts of spreadsheet software and how Excel works.
COut 3	To understand the different types of data and cell referencing in Excel.
COut 4	To describe the principles of data organization and manipulation in Excel.
COut 5	To acquire skills in creating formulas, functions, charts, and visualizations to facilitate data-driven decision-making.
COut 6	To cultivate an understanding of best practices in data management, accuracy, and collaboration within spreadsheet environments.
COut 7	To create customized templates and automated workflows using Excel's advanced features
COut 8	To propose innovative solutions and approaches to optimize data analysis and reporting in Excel

Modules at a Glance

Technical Skills-I.B		
Sr. No.	**Modules**	**No. of Lectures**
1.	**Worksheet Design, Formulas and Functions**	15
2.	**Worksheet Collaboration and Charts and Graphics**	15
Total No. of Lectures:		30

Sr. No	Modules
1.	**Worksheet Design, Formulas and Functions**
	Building, formatting, editing, proofing, managing and printing worksheets; Basic formulas; logical functions; math and financial formulas; lookup, information and text formulas Textbook: Greg Harvey, Excel 2019 ALL-IN-ONE for dummies, by John Wiley & Sons, Inc., Chapter: 2,3,4 and 5 Prerequisite: Chapter 1
2.	**Worksheet Collaboration and Charts and Graphics**
	Protecting and sharing worksheet data, hyperlinks; charting worksheet data, adding graphics objects, math and financial problems. Textbook: Greg Harvey, Excel 2019 ALL-IN-ONE for dummies, by John Wiley & Sons, Inc.,

List of Practicals:
1. Simple interest & compound interest
2. Depreciation & calculations.
3. Creating a marksheet using IF Function
4. .Graphical representation of data
5. Measures of central tendency & dispersion
6. Discrete and continuous probability distribution
7. Correlation and regression

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
1. Major (1.A Mandatory Business Studies II**)**

Technical Skills I & II (3 Credits)
Semester II

4. Vocational & Skill Enhancement Courses (VSEC)	
4.A Vocational Skill Courses (VSC)	
4.A.a Technical Skills II.A	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To introduce fundamentals of the R programming language and its applications in data analysis and statistical computing.
CObj 2	To familiarize learners with the R environment, including R-studio & teach them how to write, execute and debug R code.
Course Outcomes: Learners will be able:	
COut 1	To gain the ability to read and understand R codes written by others and effectively collaborate with other R programmers. Remember common R functions and their parameters.
COut 2	To acquire the ability to read and understand R codes written by others and effectively collaborate with other R programmers.
COut 3	To explain the fundamental concepts of R programming, such as variables, data types, and control structures.
COut 4	To understand the concept of functional programming and apply it in R.
COut 5	To create informative and visually appealing data visualizations using graphing capabilities.
COut 6	To access the accuracy and reliability of statistical analyses and models implemented in R
COut 7	To create informative and visually appealing data visualizations using graphing capabilities.
COut 8	To utilize R packages for data visualization and exploratory data analysis.

Modules at a Glance

Sr. No.	Modules	No. of Lectures
	Technical skills- II	
1.	**The R Language**	15
2.	**R Programming with Statistics and Probability**	15
	Total No. of Lectures:	30

Total number of lectures = 30 lectures , 3 credits

Sr. No	Modules
1.	**The R Language**
	Introduction of R Programming, R for basic math, creating a vector, defining a matrix, subsetting, Matrix operations and algebra, list of objects, data frames, basic plotting with graphical parameters. **Text book:** Tilman M. Davies - The Book of R_ A First Course in Programming and Statistics-No Starch Press (2016) **Chapters: 1,2,3,5,7**
2.	**R Programming with Statistics and Probability**
	Elementary statistics, basic data visualization, Random Variable and probability distributions, Probability Mass Function(pmf) and probability density function(pdf) **Text book:** Tilman M. Davies - The Book of R_ A First Course in Programming and Statistics-No Starch Press (2016) **Chapters: 13,14,15,16**

List of Practicals:

1. 1.1 Using R.calculate face value of mentioned shares, given the number of shares, face value per share and total dividend declared by the company. also find the rate of dividend.

   1.2 Create and store a vector as a new object in R, Measuring its length. Create a sequence of integers
   1.3 Using R, Consider a small economy with 3 industries and find independence between these 3 industries using matrices & analyze the economic effects of change in production within the system using matrix operations.

2. 2.1 Using R, Create a list of departments in the company, add information about different departments.and display total budget.

   2.2 Using R, create a list that contains in this order, a sequence, matrix, logical vector, character vector, factor vector, and perform extraction of data.
   2.3 Create a data frame of students appearing for math courses, and then add data frames of students appearing for economic courses, add a new column to these data frames, combine and then print them in R.

3.   3.1 Using R, create a data of 5 to 10 year old children's height and nutrition received from food, create a **plot**, use different point characters or colors to distinguish between the girl or boy, and provide a matching legend. Label the axes and give the plot a title.
3.2 Repeat the same exercise with a q-plot.

4.   4.1 Identify types of variables , ie; numerical or categorical from the given sentences.
Exercise 13.1
4.2 In R, consider a dataset of employees & their salaries in a company, calculate mean salary, count the number of employees in different salary ranges & determine the percentage and proportions of employees in given salary range
4.3 In R. create a dataset that contains information about sales and advertising expenditure for different products. calculate these statistical measures and discuss their implications based on a business theory (quartiles, percentiles, five number summary, IQR,) related to the relationship between advertising and sales.

5.   Using R, with the given data plot Barplot, Pie chart, Histogram, Box-whisker plot, Scatter plot

6.   Create & analyze restaurant data in two events ie; customer orders dessert & they give a positive review. Calculate their probabilities, conditional probabilities, intersection, union and complement of the two events using R.

7.   Probability Distributions.
   ● Binomial distribution
   ● Poisson distribution
   ● Normal distribution.

Reference Books:

1) Michael Freeman, Joel Ross - Data Science Foundations Tools and Techniques_ Core Skills for Quantitative Analysis with R and Git-Addison-Wesley (2019)

2) Norman Matloff - The Art of R Programming_ A Tour of Statistical Software Design -No Starch Press (2011)

3) Peter Dalgaard - Introductory Statistics with R-Springer (2004)

4) John Chambers (auth.) - Software for Data Analysis_ Programming with R-Springer-Verlag New York (2008)

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
4. Vocational & Skill Enhancement Courses (VSEC)
4.A Vocational Skill Courses (VSC)

4.A.a Technical Skills I & II (2 Credits)
Semester II

4. Vocational & Skill Enhancement Courses (VSEC)	
4.A Vocational Skill Courses (VSC)	
4.A.a Technical Skills II.B	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To equip participants with the knowledge and skills required to become proficient in using Microsoft Excel as a powerful tool for data analysis
CObj 2	To understand how to summarize, analyze, and visualize large data sets effectively using excel tools.
Course Outcomes: Learners will be able:	
COut 1	To understand the concepts and principles behind data analysis using Excel's data analysis tools.
COut 2	To apply knowledge of advanced charting techniques to create visually appealing and informative charts and graphs
COut 3	To analyze and evaluate the effectiveness of advanced Excel formulas and functions for specific tasks.
COut 4	To design and create customized advanced Excel formulas and functions to address specific data analysis requirements.
COut 5	To acquire skills in creating formulas, functions, charts, and visualizations to facilitate data-driven decision-making.
COut 6	To develop proficiency in utilizing spreadsheet software for organizing, analyzing, and presenting data effectively

Modules at a Glance

Technical Skills-II.B		
Sr. No.	**Modules**	**No. of Lectures**
1.	Data Analysis	15
2.	Advance Excel Functions	15
	Total No. of Lectures:	**30**

Sr. No	Modules
1.	**Data Analysis**
	Building and maintaining a data list, Filtering and querying a data list, performing large scale data analysis, information and text formulas. Textbook: Greg Harvey, Excel 2019 ALL-IN-ONE for dummies, John Wiley & Sons Chapter: 7,8 Prerequisite: Chapter 1
2.	**Advance Excel Functions**
	Hide and goal seeking, the solver, creating and formatting pivot tables, Vlookup and Hlookup, creating pivot charts, macros and VBA Textbook:Greg Harvey, Excel 2019 ALL-IN-ONE for dummies, John Wiley & Sons

List of Practicals:
1. Data Management & sorting
2. Create & manage Pivot table
3. V-lookup & H-lookup
4. Merging of multiple excels and create a list
5. Macros
6. Create an answer report & sensitivity report of LPP using solver.
7. VBA

References Books:
1) Paul McFedries, Microsoft Excel 2019 Formulas and Functions, Microsoft and Pearson Education
2) Cliff T. Ragsdale, Spreadsheet Modeling and Decision Analysis, 9th Edition, Cengage

Technical Skills I & II
Question Paper Pattern
(Academic Year: 2023-2024)

Implementation: Two hours per week sessions should be conducted batchwise with 30 students in one batch.

Examination Scheme:
   I.   Active Class Participation: 10 Marks.
  II.   Submission of Practical: 10 Marks
 III.   Semester End Practical Examination: 30 Marks

Implementation: Two hours per week sessions should be conducted batchwise with 30 students in one batch.
Evaluation Scheme:
   I.   Active Class Participation: 10 Marks.
  II.   Submission of Practical: 10 Marks
 III.   Semester End Practical Examination: 30 Marks

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
5. Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
5.A Ability Enhancement Course (AEC)
5.A.a Language and Literature I & II (3 Credits)
Semester I

5. Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System	
5.A Ability Enhancement Course (AEC)	
5.A.a Language and Literature I	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To develop learners' awareness of the communication process
CObj 2	To develop effective listening skills in students so as to enable them to comprehend instructions and become a critical listener
CObj 3	To develop effective spoken language skills so as to enable students to speak confidently, interpersonally as well as in groups
CObj 4	To develop effective writing skills so as to enable students to write in a clear, concise, domain-specific and audience-centered manner
Course Outcomes	
	On completion of the course, the learner will have the skill and knowledge of:
COut 1	Theory of communication
COut 2	Various types of oral, written and digital communication modes
COut 3	Effective interpersonal communication
COut 4	Effective business writing

Modules at a Glance

Sr. No.	Modules	No. of Lectures
**Language and Literature I**		
1.	**Theory of Communication**	15
2	**Obstacles to Communication in Business World**	15
3	**Theory and Practice of Letter Writing**	15
	Total No. of Lectures:	45

Sr. No	Modules
1	**Theory of Communication**
	1. Concept – Meaning, Definition, Process, Need, Feedback, Impact of technological advancements on communication 2. Objectives – Information, Advice, Order and instruction, Suggestion, Persuasion, Motivation, Education, Raising morale of employees and Warning 3. Channels – Formal - Vertical, Horizontal, Diagonal and Informal – Grapevine 4. Methods and Modes – Verbal & Non-verbal, Characteristics of verbal and non-verbal methods, Modes – Telephone, E-communication, Video & Satellite Conferences and social media
2	**Obstacles to Communication in Business World**
	1. Barriers to Communication – Physical, Language, Psychological, Cultural 2. Listening Skills – Importance of listening skills, Process, Cultivating good listening skills, Types of listening 3. Communication Etiquette – Etiquette of letter writing, E-mail etiquette, Telephone etiquette, social media etiquette, Corporate etiquette
3	**Theory and Practice of Letter Writing**
	1. Theory of Business letter writing – Parts, Structure, Layout, Principles of effective email writing 2. Application letter and Resume Writing 3. Job Acceptance 4. Resignation 5. SOP (Statement of Purpose) 6. LOR (Letter of Recommendation) 7. Letter to Authorities (within campus or outside on various personal or public concern, only for practice, not to be tested in examination)

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
5. Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
5.A Ability Enhancement Course (AEC)
5.A.a Language and Literature I & II (3 Credits)
Semester II

5. Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
5.A Ability Enhancement Course (AEC)
5.A.a Language and Literature II
Course Objectives and Course Outcomes

	Course Objectives
CObj 1	To familiarize the learners with the nuances of corporate communication
CObj 2	To develop ability to communicate effectively with the help of electronic media
CObj 3	To develop ability to communicate effectively with the help of electronic media
CObj 4	To develop global communication competency in learners

	Course Outcomes
	On completion of the course, the learner will have the skill and knowledge of:
COut 1	effective presentation
COut 2	communication that maximizes team effectiveness
COut 3	soft skills and employability skills
COut 4	communication that makes effective personality

Modules at a Glance

	Language and Literature I & II	
Sr. No.	**Modules**	**No. of Lectures**
1	Group Communication and Presentation Skills	15
2	Writing Skills	15
3	Business Correspondence	15
	Total No. of Lectures:	**45**

Sr. No	Modules
1	**Group Communication and Presentation Skills**
	1. Interviews – Definition, Types, Format, Technique, Preparation for job interview, Job opportunities through social media. 2. Meetings & Conferences – Committee – Definition and types, Need and importance of meetings, Conducting a meeting, Role of a chairperson and participants in a meeting, Group dynamics, Drafting, notice, agenda and MOM. Conferences – Meaning and importance, Process of organizing a conference, Modern methods of conducting conferences 3. Public Relations – Meaning, Functions of PR, External and Internal measures of PR 4. Presentation skills – Selection of topics, Structure of a presentation, Body language and non-verbal clues, Use of PPT and Canva
2	**Writing Skills**
	1. Report Writing – Parts, Types – Feasibility, Investigative, Project 2. Drafting of a Business Proposal 3. Summarization - Identification of main and supporting/sub points. Presenting these points in a cohesive manner
3	**Business Correspondence**
	1. Letter of Inquiry 2. Letter of Complaint/Claim/Adjustment 3. Sales Letter 4. Consumer Grievance letters

Language and Literature I & II
Question Paper Pattern
(Academic Year: 2023-2024)

Internal Examination & Semester End Examination – 100 Marks
Semester I

Internal – 40 marks
1. Students can select any TWO activities from the following: – 20 marks
    a. Watch video on Listening skills (uploaded by the department on Department's YouTube channel) and solving the quiz.
    b. Listen to the video in Language lab and answering questions on it.
    c. Translate any Finance or Sports related news from the regional newspaper to English. Submit the original news from the regional language and the translated version in the pdf format.
    d. Write a short story or a poem on the image/s and submit it in the video format
2. Exercises to enhance English Language Skills – 20 marks

Semester End Examination (SEE)- 60 Marks

Maximum Marks: 60
Duration   : 2 hours

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q. 1	Short Notes (attempt any THREE out of Five) – Unit I & II	15	15
Q. 2	Essay type Answers – (attempt any TWO out of Four) – Unit I & II	15	15
Q. 3	Application letter and resume writing (attempt any ONE) 1. Application and resume 2. LinkedIn profile as a job seeker	15	15
Q. 4	Letter writing (attempt any TWO) 1. SOP (Statement of Purpose) 2. LOR (Letter of Recommendation) 3. Job Acceptance 4. Resignation	15	15
	Total	**60**	**60**

Semester II

Internal – 40 marks (Attempt Any Two from Option 1, 2 and 3)

1. Students can select any TWO activities from the following: – 20 marks
    a. Watch video on Reading skills (uploaded by the department on Department's YouTube channel) and solving the quiz.
    b. Read any book of our choice and submit the book review in the recorded format.
    c. Watch any film and submit the film review in the recorded format
    d. Take any three verse from any religious scripture and explain it in English.
2. One-minute duration, short film/monologue/cinematic video in regional language with subtitles in English **OR** Watch any film/series/documentary/ serial /short films of your choice from a regional language and prepare a video having English subtitles (duration 2 min). ----- 20 marks
3. Mock interview – 20 marks

Semester End Examination (SEE) - 60 Marks

Maximum Marks: 60
Duration   : 2 hours

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q. 1	Short Notes (attempt any THREE out of Five) – Unit I	15	15
Q. 2	Essay type Answers – (attempt any TWO out of Four) – Unit I	15	15
Q. 3	a. Report Writing (attempt any ONE from Committee report / Individual report) **OR** Drafting a Business Proposal b. Summarization	10 05	10 05
Q. 4	Business Correspondence (attempt any TWO) 1. Letter of Inquiry 2. Letter of Complaint/Claim/Adjustment 3. Sales Letter 4. Consumer Grievance letters	15	15
	Total	**60**	**60**

Reference Books (with Chapters):

1. Raman Meenakshi and Singh Prakash. Business Communication. Oxford University Press , 2007. 24x19 - 275 PB 0-19-567695-5, Meenakshi X45. (For all chapters)

2. Ober Scat. Contemporary Business Communication (with CD). Bizatantra , 2005. 26x20 - 349 PB 81-7722-522-7. Scat X45 (For all chapters)

3. Pettit, John D., et al. Lesikar's Basic Business Communication. United States, Irwin/McGraw-Hill, 1999.(For all chapters)

4. Chandgadkar M.V. Tole P. *Business Communication : Theory and Practice*. Mumbai: The Macmillan Company of India Ltd 1994. English.(Semester I-Chapter-Theory of Communication)

5. Shaikh, Javed. *Communication Theory*. Delhi: Wisdom Publication, 2014. English.(Semester I-Chapter-Theory of Communication)

6. Lynch, Tony. Study Listening: A Course in Listening to Lectures and Note Taking. Germany, Cambridge University Press, 2004.(Semester-I Chapter 2-Obstacles in Communication in Business World)

7. Piyush, Bhatnagar. *Methods of Communication*. New Delhi: Rajat Publication, 2008. English.(Semester I-Chapter-Theory of Communication)

8. Palat, Raghu R.. Indian Business Etiquette. India, Jaico Publishing House, 2008.(Semester-I Chapter 2-Obstacles in Communication in Business World)

9. L, Jarvis. *Getting it Right : Letter Writing*. London: Foulsham , 1994. English.(Semester I-Chapter Personnel Correspondence)

10. Parul, Singh. *Handbook of Writing Effective Resume for Job Applications : How to Attract Employers' Attention B*. New Delhi: Exceel Books, 2007. English. (Semester I- Chapter Personnel Correspondence)

11. Sandeep, Deshmukh. *Group Communication : Theory and Methods*. New Delhi : Ane Books India, 2008. English . (Semester II-Chapter Group Communication and Presentation Skills)

12. Publisher, IMS. *Personal Interview : The Art of Facing InterviewsBook*. Mumbai: IMS Publisher, 2008. English.(Semester II-Chapter Group Communication and Presentation Skills)

13. M.E., Haynes. *Meeting Skills for Leaders : Make Meetings More Productive*. New Delhi: Viva Books , 2011. English. (Semester II-Chapter Group Communication and Presentation Skills)

14. Theobald, Theo. Develop Your Presentation Skills. Albania, Kogan Page, 2011. (Semester II-Chapter Group Communication and Presentation Skills)

15. Comfort, Jeremy, et al. Business Reports in English. United Kingdom, Cambridge University Press, 1984. (Sem II-Chapter-Writing Skills)

16. Knight, W.S.M. Business Correspondence. London: Caxton Publishing Company Ltd, 2013. English.(Semester II-Chapter Business Correspondence)

17. Test of English as a Foreign Language TOFELBook by Gruber Edward CGruber C.R.Gruber Garry R. Publication: Monarch Press New York 1981

18. Barron's How to prepare for the TOFEL (Test of English as a Foreign Language) Book by Sharp P. J. Sharpe, Pamela J. Sharp. Publication: Galotia Publications. New Delhi – 1982

19. Delta's Key to the Next Generation TOFEL Test Advanced Skill Practice (with 10 Auto CDS) – by Gallagher Nancy. Publication: New Age International Pvt. Ltd. New Delhi 2006

Suggested List of MOOCs

1. https://www.mooc-list.com/tags/communication-skills

2. https://www.mooc-list.com/.../effective-communication

3. https://www.mooc-list.com/tags/business-communication

4. https://www.skilledup.com/.../learn-communications-online-free

5. http://www.about.com/Communication+Skills+List

Courses:

1. https://www.coursera.org/learn/management-leadership-english#

2. https://www.coursera.org/learn/business#

3. https://www.coursera.org/learn/powerpoint-presentations

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
5. Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
5.B.a Value Enhancement Course (VEC)
Environmental Studies I & II (3 Credits)
Semester I

5. Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
5.B. Value Enhancement Course (VEC)
Environmental Studies I
Course Objectives and Course Outcomes
Course Objectives

CObj 1	The course will enable students to understand the integral connection between man and environment.
CObj 2	The course will make students aware about the influence of commercial activities on the environment.
CObj 3	The course is expected to develop sensitivity among students about environmental problems.
CObj 4	The course is expected to bring change in the mindset of young adults and make them follow environmental ethics.

Course Outcomes	
COut 1	The learners will be able to identify various ecosystems, their components and characteristics.
COut 2	The learners will be able to correlate between human environment and the extension of its scope to natural ecosystems.
COut 3	The learners will be enriched with knowledge about the significance of the atmosphere and other spheres for the existence of human and other species on the planet.
COut 4	The learners will be made aware of the new global concepts revolving around the human population as a resource.
COut 5	The learners will be able to understand the characteristics, pros and cons of global migration with special regards to the changing global policies around the same.
COut 6	Globally relevant concepts such as Human Development Index (HDI) and World Happiness Index (WHI) and their significance in today's times shall be understood by the learners.
COut 7	The positive and negative impacts of urbanization shall be understood by the learners.
COut 8	The learners shall be able to relate with the contemporary concepts related to urbanization such as the development of smart cities.

COut 9	The learners shall be able to identify the specific issues related to urbanization such as slum redevelopment and Air Quality Index.
COut 10	The successful completion of the course will create an environmental awareness among Commerce students.
COut 11	It will make students aware about various environmental factors and their relation to the field of Commerce, trade and industry.
COut 12	The course will highlight functional and spatial links between environment, economy and society.
COut 13	The course will create an insight into various environmental issues at various levels and environmental movements towards making the environment sustainable.

Modules at a Glance

Sr. No.	Modules	No. of Lectures
	Environmental Studies I	
1.	**Environment and Ecosystem**	15
2.	**Human Population: Strengths, Opportunities and Challenges**	15
3.	**Urbanization and Environment**	15
4.	**Reading of Thematic Maps and Map Filling**	**Internal Assessment**
	Total No. of Lectures:	45

Sr. No	Modules
1.	**Environment and Ecosystem**
	Environment: Meaning, definition, scope; Various spheres of environment (Atmosphere, lithosphere, hydrosphere and biosphere), Layers of atmosphere; Current relevance of atmospheric studies, concept of an ecosystem: definition, Characteristics, components and types, Oceanic ecosystem, functioning and structure; Importance and scope of Environmental Studies.
2.	**Human Population: Strengths, Opportunities and Challenges**
	New dimensions of population and its strengths, Population: significance and its changing perceptions, Population as a resource, Population studies in the world, Current scenario of global migration. Environment and Human Health: population & epidemiology. Human Development Index, World Happiness Index.
3.	**Urbanization and Environment**
	Concept of Urbanisation–Problems of migration and urban environment - changing land use, crowding and stress on urban resources, degradation of air and water, loss of soil cover impact on biodiversity, Urban heat islands– Emerging Smart Cities in India. Air quality Index: India and the world, Slum redevelopment and rehabilitation, Development of metro and its issues.
4.	**Reading of Thematic Maps and Map Filling (Internal Assessment)**
	Reading and interpretation of Thematic Maps: Located bars, Circles, Pie charts, Isopleths, Choropleth and Flow map, Picograms- Only reading and interpretation. Map Filling: Map filling of World (Environmentally significant features)

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
5. Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
5.B.a Value Enhancement Course
Environmental Studies I & II (3 Credits)
Semester II

Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
Value Enhancement Course
Environmental Studies II
Course Objectives and Course Outcomes

	Course Objectives
CObj 1	The course will create awareness about the reasons behind environmental degradation due to human activities.
CObj 2	The course will help students to develop the attitude to take steps for environmental protection.
CObj 3	The course is expected to promote environmentally conscious behavior towards nature.
CObj 4	The course is expected to motivate the ability to participate in various activities to solve environmental challenges.

	Course Outcomes
COut 1	The learners will be able to identify the sources of solid waste in the urban surroundings.
COut 2	The learners will be able to suggest corrective measures in order to reduce solid waste generation.
COut 3	Completion of the syllabus shall enable the learners to become better citizens with a deeper understanding of the issues caused due to mismanagement of solid waste.
COut 4	The learners shall be able to correlate current issues faced by Indian agriculture with the surrounding environmental problems.
COut 5	The syllabus shall help enrich the learners with adequate knowledge about global issues concerning food production and hunger. They shall be able to identify the causes of land degradation and suggest measures to combat the same.
COut 6	It is expected that the learners shall be able to identify the causes of various environmental concerns arising due to industrialization and also be able to suggest remedial measures for the same.
COut 7	Completion of syllabus shall enable the learners to identify various types of tourism depending upon region and purpose of travel.
COut 8	The learners shall be able to explain the concept of ecotourism and its components along with other major types of tourism.
COut 9	The syllabus shall enrich the learners with the awareness about the consequences of human impacts on the tourism sector in various forms.

Modules at a Glance

Sr. No.	Modules	No. of Lectures
	Environmental Studies II	
1.	Solid Waste Management for Sustainable Society	15
2.	Agriculture and Industries: Development and Issues	15
3.	Tourism and Environment	15
4.	Map Filling-Mumbai & Konkan Maps	Internal Assessment
	Total No. of Lectures:	45

Sr. No	Modules
1.	**Solid Waste Management for Sustainable Society**
	Classification of solid wastes–Types and Sources of Solid Waste; Effects of Solid Waste Pollution-Health hazards, Environmental Impacts; Solid Waste Management–solid waste management in Mumbai- Schemes and initiatives run by MCGM- Role of citizens in Waste Management in Urban and Rural areas
2.	**Agriculture and Industries: Development and Issues**
	Environmental Problems Associated with Agriculture: Loss of Productivity, Land Degradation, desertification- Uneven Food Production– Hunger, Malnutrition and Food Security–Sustainable Agricultural practices, New trends in agriculture: opportunities, Agriculture in urban areas. GMO/Crops. Environmental Problems Associated with Industries- Pollution, Global warming, Climate change, Ozone Layer Depletion, Acid rain, Sustainable Industrial practices– Green Business and Green Consumerism, Corporate Social Responsibility towards environment.
3.	**Tourism and Environment**
	Tourism: Meaning, Nature, Scope and importance– Typology of tourism with special reference to Ecotourism, Tourism potentials in India and challenges before India; Consequences of tourism: Positive and Negative Impacts on Economy, Culture and environment. Opportunities in the tourism sector: e.g heritage tourism, educational tourism, etc.
4.	**Map Filling (Internal Assessment)**
	Map filling of Konkan and Mumbai (Environmentally significant features)

<u>Environmental Studies I & II</u>
Question Paper Pattern
(Academic Year: 2023-2024)
Internal Examination & Semester End Examination – 100 Marks

A] Internals-40 Marks

Class test : 20 marks

Map Work/ Project / Field Work : 20 marks

Project/Field Work shall include:
1. Map Work-book.
2. Composting
3. E-waste management
4. Tetra pack management
5. Field tours/ Nature trails
6. Beach clean up
7. Group assignments/projects
8. Case studies
9. Article review
10. Book review
11. Visit to a solid waste/ medical waste/ e-waste recycling unit
12. Industrial visit
13. Visit to an NGO
14. Debate club
15. Documentary review
16. Plastic waste management
17. Case studies related to other projects mentioned above (National/International level)
18. Swachh Bharat Abhiyaan (in different areas)
19. Develop a game for waste management/green campus/environmental conservation
20. Best out of Waste Project
21. Environmental / Green Audit.

B] Semester End Examination (SEE)- 60 Marks

Maximum Marks   60

Duration   : 2 Hours

   Note: (1) All questions are compulsory, subject to internal choice.

(2) Draw diagrams wherever necessary.

(3) Figures to the right indicate full marks.

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1 (from Module I)	Attempt **any two** of the given three. (Full Length question)		15 Marks
Q-2 (from Module II)	Attempt **any two** of the given three. (Full Length question)		15 Marks
Q-3 (from Module III)	Attempt **any two** of the given three. (Full Length question)		15 Marks
Q-4 (from Module IV)	Attempt **any three** of the given five. (Short length question)		15 Marks
	Total		60

Reference Books (With Chapters):

1. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner
2. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India, Email:mapin@icenet.net
3. Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p
4. Clark R.S., Marine Pollution, Clanderson Press Oxford
5. Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Publ. House, Mumbai, 1196p
6. De A.K., Environmental Chemistry, Wiley Eastern Ltd.
7. Gleick, H.P. 1993. Water in crisis, Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute Oxford Univ. Press. 473p
8. Hawkins R.E., Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay
9. Heywood, V.H &Waston, R.T. 1995. Global Biodiversity Assessment. Cambridge Univ. Press 1140p.
10. Jadhav, H &Bhosale, V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 .
11. Mckinney, M.L. & School, R.M. 1996. Environmental Science systems & Solutions, Web enhanced edition. 639p.
12. Mhaskar A.K., Matter Hazardous, Techno-Science Publication
13. Miller T.G. Jr. Environmental Science, Wadsworth Publishing Co.
14. Odum, E.P. 1971. Fundamentals of Ecology. W.B. Saunders Co. USA, 574p
15. Rao M N. &Datta, A.K. 1987. Waste Water treatment. Oxford & IBH Publ. Co. Pvt. Ltd. 345p.
16. Sharma B.K., 2001. Environmental Chemistry. Geol Publ. House, Meerut
17. Townsend C., Harper J, and Michael Begon, Essentials of Ecology, Blackwell Science XI
18. Trivedi R.K., Handbook of Environmental Laws, Rules Guidelines, Compliances and Standards, Vol I and II, Enviro Media (R)
19. Trivedi R. K. and P.K. Goel, Introduction to air pollution, Techno-Science Publication
20. Ecotourism Economics and Environment" by Nagarajan K and Alex K Thottunkel
21. Indian Ecotourism: Environmental Rules and Regulations" by Ratandeep Singh
22. Ecotourism and Sustainable Development" by Ravishanker Singh
23. K. Agarwal et al (1996) Biodiversity and Environment, APH, Dehra Dun.
24. S.S. Negi (1993) Biodiversity and its Conservation in India, Indus Publications, New Delhi.
25. W.W. Collins and C.O. Qualset (1998) Biodiversity in Agro-ecosystem, CRC, Boston.
26. V.K. Krishnamurthy (2003) Text Book of Biodiversity, Science Publisher, Chennai
27. Bharucha Erach, Textbook of Environmental Studies for Undergraduate Courses, Universities Press, 2005

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Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
5. Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
5.B Value Enhancement Course
Indian Constitution and Electoral Governance (2 Credits)
Semester II

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Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System	
Value Enhancement Course	
5.B.b Indian Constitution and Electoral Governance	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	To help the learners understand the structure and features of the Constitution, its importance for maintaining the freedom and human dignity in the Indian society
CObj 2	To facilitate the learners, understand the key features of the Indian electoral processes and its current scenario
CObj 3	To capacitate the learners to acknowledge the features of the judiciary system of India.
CObj 4	To enable the learners to appreciate the strengths & powers and responsibilities entrusted upon the citizens by the Constitution.
CObj 5	The course is expected to make learners accountable, responsible and more vigilant in the society they live in.
Course Outcomes	
COut 1	The learners shall be able to describe the salient features of the Indian Constitution including the Preamble.
COut 2	The learners shall be able to enumerate the fundamental rights and duties of Indian citizens as enlisted under the Constitution.
COut 3	The learners shall be able to describe the concepts of union and state legislatures.
COut 4	The learners shall be able to enumerate the characteristics, powers and functions of the electoral systems of the nation.
COut 5	The syllabus should enable the learners to relate to the electoral processes in India and understand their duty of being a responsible voter and perform the same.
COut 6	The learners shall be able to describe the influence of social media on the Indian electoral process in the recent past.
COut 7	The learners should be able to apply their understanding of the judiciary processes to enhance the contemporary knowledge.
COut 8	The learners are expected to be able to describe the social impact of various landmark cases under the Supreme court.
COut 9	The learners are expected to become responsible citizens after acquiring the knowledge of civic duties.

Modules at a Glance

Indian Constitution and Electoral Governance		
Sr. No.	**Modules**	**No. of Lectures**
1	THE CONSTITUTION OF INDIA	15
2	ELECTORAL SYSTEM IN INDIA	15
3	JUDICIARY OF INDIA	Internal Component/Assessment
Total No. of Lectures:		30

Sr. No	Modules
1.	**THE CONSTITUTION OF INDIA**
	A. Introduction to the Constitution of India. Structure of the constitution. Features of the Indian Constitution. Preamble and its philosophy. B. Fundamental rights, fundamental duties and directive principle of state policy. C. Union legislature, State legislature, Amendments to the constitution.
2.	**ELECTORAL SYSTEM IN INDIA**
	A. Introduction to the electoral system in India. Election Commission of India, State election commission. Powers & functions of the election commission. B. Electoral process. Public participation in the electoral process. Voting as a civic duty. Voters' education and awareness. Electronic voting machine (EVM). C. Strengths and drawbacks of the Indian electoral system, impact of social media on the electoral processes
3.	**JUDICIARY OF INDIA (Internal Component/Assessment)**
	A. Introduction to the judicial system in India. Functions of the judicial system. B. Supreme Court of India, High Courts and District Courts. Consumer courts. C. Strengths and weaknesses of Indian Judiciary system, concept of fast-track court cases, Case studies on significant judgments passed by the Supreme Court of India.

Syllabus of courses of FY B. Com Programme
(With effect from the Academic Year 2023-2024)
5. Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System
5.C. Indian Knowledge System (IKS)
5.C.a Indian Knowledge System I (2 Credits)

Semester I

Ability Enhancement Courses, Value Enhancement Course, Indian Knowledge System	
5.C.a Indian Knowledge System I & II (2 Credits)	
5.C.a Conservation and Sustainability in Ancient India	
Course Objectives and Course Outcomes	
Course Objectives	
CObj 1	The course will enable the learner to understand the scientific and moral value of traditional ancient Indian knowledge.
CObj 2	The course is expected to convert the ancient wisdom to the applied aspects of the modern scientific paradigm.
CObj 3	The course is expected to create interest and excitement in the learner to explore more on the specific area of knowledge.
CObj 4	The course is expected to empower the learner to inspire others in learning our own traditional practices of sustainability.
CObj 5	The course is expected to develop the interest in the learner to do further research in the specific area of knowledge.
Course Outcomes	
COut 1	The learners shall be able to acknowledge the contribution of traditional Indian wisdom in various commercial fields.
COut 2	The learner should be able to draw connections between the trade & commercial activities along with their influence on the environment and the efforts to address the same.
COut 3	The learners shall be able to identify traditional eco-friendly options for current modes of transportation.
COut 4	The learner should be able to understand the ancient practices of resource conservation and to have a holistic approach towards sustainable development in modern times.
COut 5	The learners should be able to analyze the current practices of land management with respect to ancient Indian practices for the conservation of the same.
COut 6	The syllabus shall enable the learners to correlate the conventional practices of water conservation with special reference to ancient wisdom in the same regards.
COut 7	The learners shall be able to suggest measures for forest conservation through various ancient Indian solutions.
COut 8	The learners should be able to evaluate the Indian contribution in various contemporary fields of social sciences and technologies.
COut 9	The learners should be able to describe the case studies to illustrate the significant contribution of Indian scholars in various conventional fields of social sciences.

.COut 10	The learners should be able to examine the future perspectives and possibilities of various aspects of the Indian Knowledge System to enrich the society.

Modules at a Glance

Conservation and Sustainability in Ancient India		
Sr. No.	Modules	No. of Lectures
1.	CONVENTIONAL TRADE & COMMERCE AND ENVIRONMENT	15
2.	RESOURCE CONSERVATION AND SUSTAINABILITY	15
3.	SIGNIFICANT INDIAN CONTRIBUTIONS TO THE WORLD	Internal Component/Assessment
	Total No. of Lectures:	45

Sr. No	Modules
1.	**CONVENTIONAL TRADE & COMMERCE AND ENVIRONMENT**
	A. Introduction and overview of Indian Knowledge System. Indian disciplinary knowledge system in different fields like, architecture, science & technology, nature, astronomy, agriculture, health & medicine, Defense (case study of Rani Abbakka Chowta who defeated Portuguese) B. Traditional commercial activities & trade practices with reference to environmental conservation: Agricultural trade, Silk, Cotton, Spices, Metallurgy, Textile industry, etc. C. Transportation and its modes: Grand Trunk road, Boat & ship-building, Energy efficiency in the transport sector: a current scenario, Eco mobility. Impact of transport on climate, impact of climate on transport.
2.	**RESOURCE CONSERVATION AND SUSTAINABILITY**
	A. Land Management & Conservation: Ancient & traditional agricultural activities, Conservation strategies, Harappan civilization-town planning, etc. B. Water Management & Conservation: Harappan civilization, ancient practices of irrigation, Tanks, Lakes, Stepwells, Traditional rain-water harvesting, Community involvement. C. Forest & Wildlife Conservation: Sacred forests, sacred groves, sacred hills, Social forestry, Agroforestry, Animal worshiping, Worshiping natural forces. Women and conservation-Ecofeminism.
3.	**SIGNIFICANT INDIAN CONTRIBUTIONS TO THE WORLD** **(Internal Component/Assessment)**
	A. Contribution in the field of agriculture: Food crops, Cotton, Animal husbandry, etc B. Contribution in the field of science & technology: Invention of zero, etc. C. Contributions in the field of health & medicine: Ayurveda, Meditation, Yoga, etc. D. Case studies on Indian Knowledge System on any particular/ specific area of knowledge: Ayurveda, Agriculture, Astronomy, Architecture, Economics, Mathematics, Philosophy, Yoga, Medicine, Nature, Politics, Weaponry, Military science, Literature, Poetics or any other area of knowledge. Indian Knowledge System- Future perspectives: Challenges and Opportunities.

Indian Knowledge System I & II
Question Paper Pattern
(Academic Year: 2023-2024)
Internal Examination & Semester End Examination – 100 Marks

A] Internals-40 Marks

MODULE-III is given for internal assessment. Students will be writing assignments on the selected topics

B] Semester End Examination (SEE)- 30 Marks

Maximum Marks   30
Duration   : 1
Hour
     Note:

Question No.	Particulars (Nature of Questions)	Marks (Given)	Marks (To Be Attempted)
Q-1 (from Module I)	Attempt **any one** of the given two. (Full Length question)		10 Marks
Q-2 (from Module II)	Attempt **any one** of the given two. (Full Length question)		10 Marks
Q-3 (from Module III)	Attempt **any two** of the given four. (Short Length question)		10 Marks
	Total		30

Reference Books (With Chapters):

 'Indian Contribution to science', compiled by Vijnana Bharati.

2. 'Knowledge traditions and practices of India', Kapil Kapoor, Michel Danino, CBSE, India.

3. Dharampal, Indian Science and Technology in the Eighteenth Century, Academy of Gandhian Studies, Hyderabad, 1971, republic. Other India Bookstore, Goa, 2000

4. Alok Kumar, Sciences of the Ancient Hindus: Unlocking Nature in the Pursuit of Salvation, CreateSpace Independent Publishing, 2014

5. B.V. Subbarayappa, Science in India: A Historical Perspective, Rupa, New Delhi, 2013

6. AnishaShekharMukherji, Jantar Mantar: Maharaja Sawai Jai Singh's Observatory in Delhi, AMBI Knowledge Resources, New Delhi, 2010

7.   Thanu Padmanabhan, (ed.), Astronomy in India: A Historical Perspective, Indian National Science Academy, New Delhi & Springer (India), 2010

8.   AcharyaPrafulla Chandra Ray, A History of Hindu Chemistry, 1902, republ., Shaibya Prakashan Bibhag, centenary edition, Kolkata, 2002

9.   Anil Agarwal & Sunita Narain, (eds), Dying Wisdom: Rise, Fall and Potential of India's Traditional Water-Harvesting Systems, Centre for Science and Environment, New Delhi, 1997

10. Fredrick W. Bunce:The Iconography of Water: Well and Tank Forms of the Indian Subcontinent, DK Printworld, New Delhi, 2013

11. The Positive Sciences of the Ancient Hindus; BrijendraNath Seal; 4th Edition; 2016

12. Fine Arts & Technical Sciences in Ancient India with special reference to Someśvara's Mānasollāsa; Dr. Shiv Shekhar Mishra, Krishnadas Academy, Varanasi 1982

13. A Concise History of Science in India, ed. D M Bose, S N Sen and B V Subbarayappa; INSA; 2009

14. Science and Technology in Medieval India - A Bibliography of Source Materials in Sanskrit, Arabic and Persian by A Rahman, M A Alvi, S A Khan Ghori and K V Samba Murthy; 1982.

15. Science and Technological Exchanges between India and Soviet Central Asia (Medieval Period), ed B V Subbarayappa;1985

16. Scientific and Technical Education in India, 1781-1900 by S N Sen; 1991

17. History of Technology in India, Vol. I, ed. A K Bag (1997); Vol III, ed. K V Mital (2001); Vol-II by Harbans Mukhia (2012).

18. Coomaraswamy, Ananda K. 2002. Early Indian Architecture: Cities and City-Gates, Munshiram Manoharlal Publishers.

19. S. N. Sen and K. S. Shukla, History of Astronomy in India, 2nd Ed., INSA, Delhi, 2001.

20. S. Balachandra Rao, Indian Astronomy an Introduction, Universities Press, Hyderabad, 2000

21. History of Astronomy: A Handbook, Edited by K. Ramasubramanian, Aniket Sule and Mayank Vahia, S and HI, IIT Bombay, and T.I.F.R. Mumbai, 2016.

22. B.V. Subbarayappa and K.V. Sarma, Indian Astronomy: A Source Book, Nehru Centre, Bombay, 1985.